

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No. MO-0001082

Owner: AmerenUE
Address: 1901 Choteau Avenue, PO Box 66149, St. Louis, MO 63166-6149

Continuing Authority: Same as above
Address: Same as above

Facility Name: AmerenUE, Taum Sauk Power Plant
Address: Route 1, Box 112, Annapolis, MO 63620

Legal Description: SE ¼, SW ¼, Sec. 21, T33N, R2E, Reynolds County

Receiving Stream: East Fork of Black River (P)
First Classified Stream and ID: East Fork of Black River (P) (02737)
USGS Basin & Sub-watershed No.: (11010007-030002)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

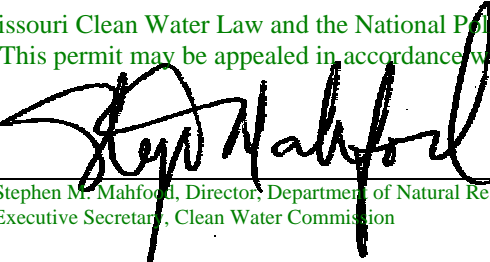
FACILITY DESCRIPTION

See page 2

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

June 25, 2004
Effective Date

June 24, 2009
Expiration Date
MO 780-0041 (10-93)


Stephen M. Mahfood, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

Jim Hull, Director of Staff, Clean Water Commission

FACILITY DESCRIPTION - (continued)

Outfall #001 - Power Plant - SIC #4911
Plant sump/oil water separator.
Design flow is 2,930,000 gallons per day.
Actual flow is 240,000 gallons per day.

Outfall #002 - Power Plant - SIC #4911
Extended aeration/sludge disposal is by contract hauler.
Design flow is 1,300 gallons per day.
Design sludge production is 0.5 dry ton/year.

Outfall #003 - Power Plant - SIC #4911
Non-contact cooling water/intermittent flow.
Design flow is 6,050,000 gallons per day.
Actual flow is 1,400,000 gallons per day.

Outfall #004 - Power Plant - SIC #4911
Non-contact cooling water/intermittent flow.
Design flow is 125,000 gallons per day.
Actual flow is 110,000 gallons per day.

Outfall #005 - Power Plant - SIC #4911
Storm water runoff.
Design flow is 15,000 gallons per day.
Actual flow is rainfall dependent.

					PAGE NUMBER 3 of 6	
A. INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PERMIT NUMBER MO-0001082	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The interim effluent limitations shall become effective upon issuance and remain in effect through May 31, 2005. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	INTERIM EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001</u>						
Flow	MGD	*		*	once/quarter***	24 hr. estimate
Total Suspended Solids	mg/L	100		30	once/quarter***	grab
Oil & Grease	mg/L	20		15	once/quarter***	grab
pH - Units	SU	**		**	once/quarter***	grab
<u>Outfall #002</u>						
Flow	MGD	*		*	once/quarter***	24 hr. estimate
Biochemical Oxygen Demand ₅	mg/L	45		30	once/quarter***	grab
Total Suspended Solids	mg/L	45		30	once/quarter***	grab
pH - Units	SU	**		**	once/quarter***	grab
<u>Outfall #003</u>						
Flow	MGD	*		*	once/quarter***	24 hr. estimate
Temperature	°F	*		*	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>October 28, 2004</u> .						
<u>Outfall #004</u>						
Flow	MGD	*		*	once/year****	24 hr. estimate
Temperature	°F	*		*	once/year****	grab
<u>Outfall #005</u>						
Flow	MGD	*		*	(Note 1)	24 hr. estimate
Settleable Solids	ml/L	2.5		2.0	(Note 1)	grab
Oil & Grease	mg/L	20		15	(Note 1)	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>October 28, 2004</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Part I STANDARD CONDITIONS DATED <u>October 1, 1980</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

					PAGE NUMBER 4 of 6	
A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PERMIT NUMBER MO-0001082	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective June 1, 2005, and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001</u>						
Flow	MGD	*		*	once/quarter***	24 hr. estimate
Total Suspended Solids	mg/L	100		30	once/quarter***	grab
Oil & Grease	mg/L	20		15	once/quarter***	grab
pH - Units	SU	**		**	once/quarter***	grab
<u>Outfall #002</u>						
Flow	MGD	*		*	once/quarter***	24 hr. estimate
Biochemical Oxygen Demand ₅	mg/L	45		30	once/quarter***	grab
Total Suspended Solids	mg/L	45		30	once/quarter***	grab
pH - Units	SU	**		**	once/quarter***	grab
Fecal Coliform*****	#/100ml	1000		400	once/quarter***	grab
<u>Outfall #003</u>						
Flow	MGD	*		*	once/quarter***	24 hr. estimate
Temperature	°F	*		*	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>October 28, 2004</u> .						
<u>Outfall #004</u>						
Flow	MGD	*		*	once/year****	24 hr. estimate
Temperature	°F	*		*	once/year****	grab
<u>Outfall #005</u>						
Flow	MGD	*		*	(Note 1)	24 hr. estimate
Settleable Solids	ml/L	2.5		2.0	(Note 1)	grab
Oil & Grease	mg/L	20		15	(Note 1)	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>October 28, 2004</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Part I</u> STANDARD CONDITIONS DATED <u>October 1, 1980</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0.
- *** Sample once per quarter in January, April, July & October.
- **** Sample once per year in July.
- ***** Final limitations and monitoring requirements for fecal coliform are applicable only during the recreational season from April 1 through October 31.

Note 1 - Monitoring for this outfall will not be required as long as the permittee maintains Best Management Practices (BMP) for storm water outlined in the October 15, 2003, letter and enclosures from Michael Bollinger. This letter is considered a part of the application for renewal of the permit.

C. SPECIAL CONDITIONS

1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - (b) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

2. All outfalls must be clearly marked in the field.
3. This permit authorizes the continued use of Outfall #005 to discharge uncontaminated storm water. Monitoring of this outfall will not be required as long as the permittee adheres to Best Management Practices (BMP's) as described in the October 15, 2003, letter and attachments from Michael Bollinger. Should an inspection show the BMP's are not being followed, the department may modify the permit to require monitoring of this outfall.
4. Report as no-discharge when a discharge does not occur during the report period.
5. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;

C. SPECIAL CONDITIONS (continued)

- (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
 - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
6. General Criteria. The following water quality criteria shall be applicable to all waters of the state at all times, including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
- (a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (e) There shall be no significant human health hazard from incidental contact with the water;
 - (f) There shall be no acute toxicity to livestock or wildlife watering;
 - (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

D. SCHEDULE OF COMPLIANCE

- 1. Permittee shall submit engineering plans and specifications for disinfection of the effluent for Outfall #002, to the Southeast Regional Office, Department of Natural Resources (DNR), by October 1, 2004.
- 2. Permittee shall obtain a construction permit from the DNR, complete construction of disinfection facilities, and meet final effluent limitations for fecal coliform by June 1, 2005.